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ELECTRONICALLY FILED - 2019 June 21 3:05 PM - SCPSC - Docket # 2018-102-S - Page 1 of 17

March 2, 2017

Mark Yodice, PE
Thomas & Hutton
P.O. Box 1522
Mount Pleasant, SC 29465

RE: Construction Permit 39296-WW Modification
Kiawah River Plantation WWTP
Charleston County

Dear Mr. Yodice:

We have received and reviewed your construction permit modification request dated January 19, 2017, with additional information provided in your letter of February 21, 2017. The plans submitted with your request follow the previously approved Preliminary Engineering Report – Addendum No. 01 dated November 2016, and approved on December 21, 2016.

Please see the enclosed modified construction permit. Please contact me at (803) 898-1271 or edwardaj@dhec.sc.gov if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "AJ Edwards", is written over a light blue horizontal line.

Andrew J. Edwards
Domestic Wastewater Permitting Section
Water Facilities Permitting Division

cc: Michael Montebello, Manager, Domestic Wastewater Permitting Section
Harvey Wilkins, Low Country Region BEHS Charleston Office
Kevin O'Neill, 211 King Street, Suite 300, Charleston, SC 29401

Wastewater Construction Permit Bureau of Water



ELECTRONICALLY FILED - 2019 June 21 3:05 PM - SC PSC - Docket # 2018-102-S - Page 2 of 17

PROJECT NAME: **KIAWAH RIVER PLANTATION WWTP**

COUNTY: **CHARLESTON**

LOCATION: 2501 Mullet Hall Road, Johns Island, SC 29455

PERMISSION IS HEREBY GRANTED TO:

KIAWAH RIVER PLANTATION HOLDINGS, LP
211 KING STREET
SUITE 300
CHARLESTON, SC 29401

for the construction of a new wastewater treatment plant in accordance with the construction plans, specifications, design calculations and the Construction Permit Application signed by Mark Yodice, Registered Professional Engineer, S.C. Registration Number: 13293.

PROJECT DESCRIPTION:

Phase I of the wastewater treatment plant will be 110,000 gpd. Treatment processes will include initial screening followed by membrane bioreactor treatment from a MicroBLOX modular unit by Ovivo and UV disinfection, prior to storage in a 770,000 gallon lined lagoon. Wastewater effluent from the lagoon will be pumped to an adjacent 16.65-acre land application site where it will be applied with low trajectory spray heads at a rate not exceeding 2.0 inches/week for a total capacity of 129,037 gpd. Solids will be dewatered and hauled to the Oakridge Landfill.

TREATMENT FACILITY:

The effluent will be discharged to the Kiawah River Plantation Wastewater Treatment Plant with a design flow rate of 110,000 gallons per day. The effluent concentrations of those constituents the wastewater treatment system is designed to remove or reduce are contained in NPDES permit ND0088897.

Treatment Plant Classification: Group IV - Physical/Chemical

STANDARD CONDITION:

In accepting this permit, the owner agrees to the admission of properly authorized persons at all reasonable hours for the purpose of sampling and inspection. This is a permit for construction only and does not constitute DHEC approval, temporary or otherwise, to place the system in operation. An Approval to Place in Operation is required and can be obtained following the completion of construction by contacting the Low Country Region BEHS Charleston Office at (843) 953-0150. Additional permits may be required prior to construction (e.g., Stormwater).

SPECIAL CONDITIONS:

None

PERMIT NUMBER:	39296-WW
ISSUANCE DATE:	January 13, 2016
EXPIRATION DATES:	March 2, 2018 (to begin construction) March 2, 2020 (to obtain Approval to Place in Operation)


Jeffrey P. deBessonet, P.E., Director
Water Facilities Permitting Division

AJE

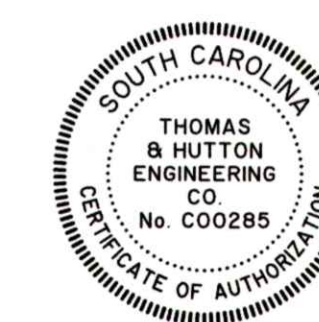
Modifications:

- 12/12/2016 - Permit expiration date to begin construction extended from January 13, 2017, to June 13, 2017.
3/2/2017 - Project modifications for reduced Phase I cost include a smaller project footprint, UV disinfection, a smaller Phase I effluent storage lagoon, and removal of sludge holding and permanent dewatering facilities from the Phase I scope. Permit expiration dates extended, respectively.

CHARLESTON COUNTY, SOUTH CAROLINA

KIAWAH RIVER PLANTATION HOLDINGS, LP
OCEAN BOULEVARD PROPERTIES
A SOUTH CAROLINA LIMITED PARTNERSHIP

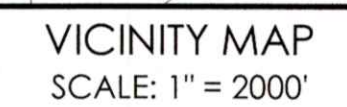
PREPARED BY:



DIRECTOR, WATER FACILITIES PERMITTING DIVISION
MODIFICATION



RECEIVED
FEB 10 2017
WATER FACILITIES
PERMITTING DIVISION



SUBMITTAL HISTORY	
SUBMITTED TO	DATE

RECEIVED
JAN 30 2017
CHARLESTON EQC OFFICE



Know what's below.
Call before you dig.

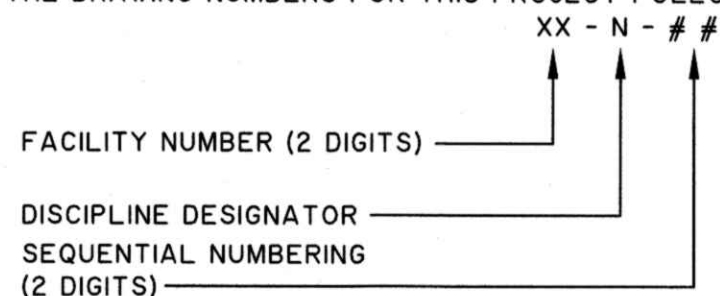


PO Box 1522
Mt. Pleasant, SC 29465-1522
p.843.849.0200 f.843.849.0203

www.thomasandhutton.com

[illegible][illegible][illegible][illegible]

THE DRAWING NUMBERS FOR THIS PROJECT FOLLOW THE FOLLOWING GUIDELINE:



FACILITY NUMBER	DISCIPLINE DESIGNATOR	SEQUENTIAL NUMBERING
01 - GENERAL	C CIVIL	01
02 - WATER SUPPLY LINE	A ARCHITECTURAL	02
05 - OVERALL SITE	S STRUCTURAL	03
06 - WASTEWATER TREATMENT PLANT SITE	E ELECTRICAL	ETC.
07 - EFFLUENT STORAGE LAGOON	G GENERAL	
08 - SPRAYFIELD IRRIGATION PUMP STA.	D PROCESS MECHANICAL	
09 - LAND APPLICATION SYSTEM (LAS)	M MECHANICAL HVAC	
50 - ELECTRICAL	P PLUMBING	
60 - INSTRUMENTATION & CONTROL	R INSTRUMENTATION & CONTROL	
	L LANDSCAPE	
	Y YARD PIPING	
	V SURVEYING	
	I INSTRUMENTATION	

PROJECT INFORMATION

OWNER:
KIAWAH RIVER PLANTATION
HOLDINGS, LP AND OCEAN
BOULEVARD PROPERTIES LIMITED
PARTNERSHIP
211 KING STREET, SUITE 300
CHARLESTON, SC 29401
(843) 722-2615

SITE/STRUCTURAL:
THOMAS & HUTTON
682 JOHNNIE DODDS BLVD.
SUITE 100
MT. PLEASANT SC, 29464
(843) 849-0200

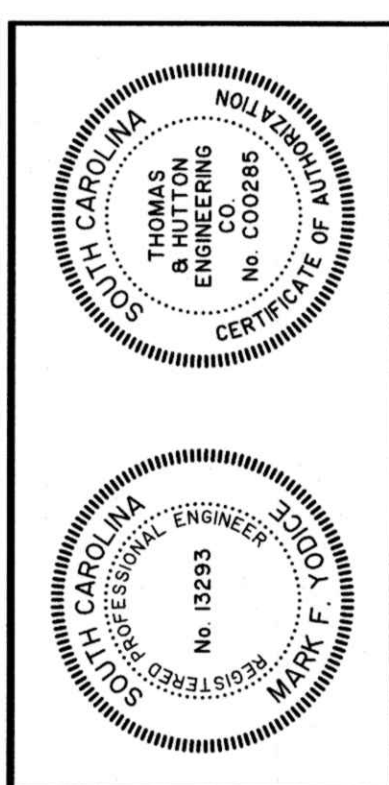
ARCHITECTURE:
SWALLOWTAIL ARCHITECTURE, LLC
814 N. CEDAR STREET
SUMMERVILLE SC, 29483
(843) 885-9400

MEP ENGINEERING:
CHATHAM ENGINEERING
109 PARK OF COMMERCE DRIVE
SAVANNAH, GA 31405
912-238-2400

WATER:
ST. JOHN'S WATER COMPANY
3362 MAYBANK HWY
JOHN'S ISLAND, SC 29455
(843) 768-0641

POWER:
BERKELEY ELECTRIC
ST. JOHNS DISTRICT
3351 MAYBANK HIGHWAY
P.O. BOX 1285
ST. JOHNS, SC 29455
(843)559-2458

TELEPHONE:
AT&T
975 SAVANNAH HWY, SUITE 30
CHARLESTON, SC 29407
(843)556-7611

[illegible]

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KIAWAH RIVER PLANTATION
HOLDINGS, LP
 CHARLESTON COUNTY, SOUTH CAROLINA

KIAWAH RIVER PLANTATION WWTP PHASE I

INDEX OF DRAWINGS

JOB NO:	J-25328.0002
DATE:	12/16/16
DRAWN:	DNF
DESIGNED:	KEN
REVIEWED:	MFY
APPROVED:	MFY
SCALE:	NTS

01-G-02

1. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL ("X" IT" SIZE FORMAT) FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHALL BE SUBMITTED TO THE ENGINEER AND APPLICABLE REGULATORY AGENCY A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO NEEDING TO OBTAIN A TRAFFIC CONTROL PERMIT / APPROVAL.
2. PRIOR TO THE SCHEDULING OF A PRE-CONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL SUBMIT A PRELIMINARY DETAILED TRAFFIC CONTROL PLAN FOR REVIEW BY THE ENGINEER. THE TRAFFIC CONTROL PLAN AS WELL AS ALL TRAFFIC CONTROL DEVICES UTILIZED ON THE PROJECT MUST COMPLY WITH THE "FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" FOR STREETS AND HIGHWAYS, FOLLOWING APPROVAL OF THE PLAN, A REPRODUCIBLE DRAWING SHALL BE SUBMITTED TO SCDOT.
3. NOTIFY SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION A MINIMUM OF THREE (3) FULL WORKING DAYS BEFORE COMMENCING WORK. OBTAIN AND KEEP A COPY OF THE SCDOT PERMIT ON SITE AT ALL TIMES. NO WORK CAN BE STARTED UNTIL ALL NECESSARY PERMITS ARE ONSITE.
4. FOR ALL WORK IN SCDOT ROW, CONTRACTOR SHALL MAINTAIN TRAFFIC IN ACCORDANCE WITH SCDOT GUIDELINES. SCDOT ENCROACHMENT PERMIT MUST BE ISSUED BEFORE BEGINNING ANY WORK WITHIN SCDOT ROW.
5. CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL, MESSAGE BOARDS, JERSEY BARRICADES WITH CRASH ATTENUATORS ON ONE SIDE, ETC., PER SCDOT REQUIREMENTS, AT NO ADDITIONAL COST.
6. ALL WORK TO BE PERFORMED IN THE SCDOT ROW WILL BE IN ACCORDANCE WITH SCDOT SPECIFICATIONS (A POLICY FOR ACCOMMODATING UTILITIES ON HIGHWAY RIGHT OF WAY), LATEST EDITION.
7. ALL WORK INDICATED IN THE SCDOT ROW ARE TO BE COMPLETED WITHIN ONE (1) YEAR OF THE APPROVAL DATE ON THE SCDOT PERMIT. ALL DRIVEWAY CONSTRUCTION IS TO INCLUDE THE SURFACE TREATMENT AND ALL SHOULDER STABILIZATION REQUIRED.
8. ALL WORK ON HEAVILY TRAVELED ROADWAYS THAT WILL INTERRUPT TRAFFIC FLOW WILL BE DONE BETWEEN THE HOURS OF 9:00 A.M. AND 4:00 P.M. UNLESS PERMISSION FROM THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION IS OBTAINED. ADDITIONAL PROVISIONS MAY BE REQUIRED IN AREAS WHERE A SCHOOL OR HEAVY PEDESTRIAN TRAFFIC IS PRESENT.
9. ANY WORK THAT IS REQUIRED ON SATURDAY MUST BE APPROVED BY THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION PRIOR TO COMPLETION OF WORK. NO SUNDAY WORK WILL BE PERMITTED UNLESS AN EMERGENCY ARISES DURING THE CONSTRUCTION OF THE PROJECT.
10. ALL WORK PERFORMED UNDER THE PERMIT SHALL CARRY A TWO (2) YEAR WARRANTY PERIOD BY THE CONTRACTOR. THIS PERIOD WILL BEGIN AS OF THE DATE OF THE FINAL INSPECTION AND/OR SCDOT ACCEPTANCE LETTER.
11. ANY CONSTRUCTION MATERIALS OR EQUIPMENT TO BE STORED OR PARKED ALONGSIDE OF ROADWAY OR IN THE RIGHT-OF-WAY, WILL BE PLACED A MINIMUM OF 30 FEET FROM THE EDGE OF PAVEMENT OR HAVE WARNING DEVICES AS REQUIRED AND APPROVED BY SCDOT.
12. NO OPEN CUTS IN EXISTING PAVEMENT ARE TO BE MADE ON FRI DAYS OR WEEKENDS.
13. THERE SHALL BE NO EXCAVATION OF SOIL CLOSER THAN TWO (2) FEET FROM ANY PUBLIC UTILITY POLE OR APPURTENANT FACILITY WITHOUT THE WRITTEN CONSENT OF THE OWNER THEREOF. SPECIAL PERMISSION OF THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION AFTER AN OPPORTUNITY TO BE HEARD IS GIVEN THE OWNER OF SUCH POLE OR APPURTENANT FACILITY MAY BE GIVEN.
14. CONTRACTOR IS BOUND BY THE REQUIREMENTS OF THE SCDOT ENCROACHMENT PERMIT. CONTRACTOR SHALL ABIDE BY ALL SCDOT REQUIREMENTS AT NO EXTRA COST TO THE OWNER.
15. CONTRACTOR IS BOUND BY THE REQUIREMENTS OF THE SCDOT ENCROACHMENT PERMIT. CONTRACTOR SHALL ABIDE BY ALL CHARLESTON COUNTY REQUIREMENTS AT NO EXTRA COST TO THE OWNER.
16. DO NOT EXCAVATE WITHIN 5 FEET OF BETSY KERRISON PARKWAY WITHOUT CHARLESTON COUNTY AND SCDOT WRITTEN APPROVAL.
17. SCHEDULE SCDOT AND COUNTY INSPECTION AT LEAST 72 HOURS PRIOR TO EXCAVATION.
18. EXCAVATIONS SHALL NOT BE LEFT UNATTENDED WHILE OPEN.

SEWER NOTES:

- SEWER NOTES:**

DHEC NOTES:

- DHEC NOTES:**

[illegible]

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**KIAWAH RIVER PLANTATION
HOLDINGS, LP**

CHARLESTON COUNTY, SOUTH CAROLINA










KIAWAH RIVER PLANTATION WWTP PHASE I

GENERAL CIVIL NOTES







JOB NO:	J-25328.0002
DATE:	12/16/16
DRAWN:	DNF
DESIGNED:	KEN
REVIEWED:	MFY
APPROVED:	MFY
SCALE:	NTS

01-G-04

UTILITY SYMBOLS

<u>DESCRIPTION</u>	<u>EXISTING</u>	<u>PROPOSED</u>
POWER LINE OVERHEAD		
UNDERGROUND FIBER OPTIC CABLE		
TELEPHONE LINE		
POWER LINE UNDERGROUND		
POWER POLE		
LIGHT POLE		





PAVEMENT SYMBOLS

<u>DESCRIPTION</u>	<u>EXISTING</u>	<u>PROPOSED</u>
ASPHALT PAVEMENT		
CONCRETE PAVEMENT		
GRAVEL SURFACING		

WATER SYMBOLS

<u>DESCRIPTION</u>	<u>EXISTING</u>	<u>PROPOSED</u>
WATER LINE		
WATER SERVICE W/ METER BOX		
RECLAIMED WATER LINE	N/A	
BACKFLOW PREVENTER		
TAPPING SLEEVE AND VALVE	N/A	
WATER LINE BEND	N/A	
FIRE HYDRANT W/ 6" VALVE & BOX		
YARD HYDRANT	N/A	
GATE VALVE AND BOX		
TEE JOINT AND PLUG	N/A	


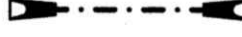







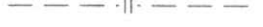


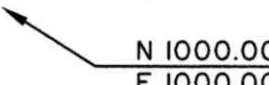
SANITARY SEWER & FORCE MAIN SYMBOLS

<u>DESCRIPTION</u>	<u>EXISTING</u>	<u>PROPOSED</u>
SANITARY SEWER FORCE MAIN	----- 14" FM -----	----- FM -----
SANITARY MANHOLE		
GRAVITY SANITARY SEWER PIPE	----- 12" SS -----	-----
PLUG VALVE		

LINE TYPES

<u>DESCRIPTION</u>	<u>EXISTING</u>	<u>PROPOSED</u>
RIGHT-OF-WAY (ROW)	-----	-----
€ ROAD	-----	-----
EASEMENT	-----	-----
CLEARING LIMITS	N/A	----- CL ----- CL ----- CL -----
FENCE LINE	----- X -----	----- X -----
WETLANDS LINE	----- X -----	N/A

DRAINAGE & TOPOGRAPHY SYMBOLS

<u>DESCRIPTION</u>	<u>EXISTING</u>	<u>PROPOSED</u>
CURB INLET	N/A	N/A
CULVERT		
GRATE INLET		
STORM MANHOLE (JUNCTION BOX)	N/A	
STORM PIPE		
DITCH OR SWALE (UNPAVED)		
CONTOUR		
SPOT ELEVATION	17.28 X SSMH	17.28 X SSMH
COORDINATE LOCATION POINT	 N 1000.00 E 1000.00	 N 1000.00 E 1000.00

CIVIL LEGEND:

1. EXISTING TOPOGRAPHY AND OTHER EXISTING SITE FEATURES ARE SHOWN SCREENED. SEE THE BOUNDARY & TOPOGRAPHIC SURVEY BY THOMAS & HUTTON FOR THE SURVEY LEGEND.
2. SEE EROSION & SEDIMENT CONTROL PLANS FOR THEIR CORRESPONDING LEGEND AND NOTES.

ABBREVIATIONS

BAC	BACK OF CURB	RAPP	RECYCLED ASPHALT
BM	BENCHMARK	RCP	REINFORCED CONCRETE PIPE
BTTM	BOTTOM	RJ	RESTRAINED JOINT
BV	BALL VALVE	RM	RECLAIMED WATER
CI	CAST IRON	ROW / R/W	RIGHT-OF-WAY
C	CENTER LINE	SHC	SQUARE FEET
CL	CLEARING LIMITS	SF	SANITARY SEWER
CPMA	CORRUGATED METAL PIPE ARCH	SS	SUBGRADE DRAIN
CMP	CORRUGATED METAL PIPE	SGD	TOP OF CURB
CO	CLEAN OUT	TOC	TOP OF CONCRETE
CPP	CORRUGATED PLASTIC PIPE	TC	TOP OF GRAVEL
DIA	DIAMETER	TG	TOP OF PAVEMENT
DOT	DEPARTMENT OF TRANSPORTATION	TP	TOP OF ROCK
DI / DIP	DUCTILE IRON / DUCTILE IRON PIPE	TR	TOP OF SIDEWALK
EL	ELEVATION	TS	TOP OF WALL
EJ	EXPANSION JOINT	TW	TOP OF WATER
EOP	EDGE OF PAVEMENT	TYP	TYPICAL
EW	EACH WAY	W	WATER
EXIST	EXISTING	W/	WITH
FFE	FINISHED FLOOR ELEVATION	WV	WATER VALVE
FIN	FINISHED	ø	DIAMETER
FLG	FLANGED		
FM	FORCE MAIN (SANITARY SEWER)		
FR	FRAME		
FG	FINISHED GRADE	PC	<u>CURVE DATA</u>
FE	FINISHED ELEVATION	PT	POINT OF CURVE
GI	GRATE INLET	PVC	POINT OF TANGENCY
GV	GATE VALVE	EVC	BEGINNING OF VERTICAL CURVE
HWY	HIGHWAY	e	ENDING OF VERTICAL CURVE
HDPE	HIGH DENSITY POLYETHYLENE	Δ	EXTERNAL DISTANCE
ID	INSIDE DIAMETER	Δ	DELTA
IE	INVERT ELEVATION	T	TANGENT LENGTH
LF	LINEAR FEET	L	LENGTH OF CURVE
IRRIG	IRRIGATION	R	RADIUS
MAX.	MAXIMUM		
MJ	MECHANICAL JOINT		
MIN.	MINIMUM		
NTS	NOT TO SCALE		
NIC	NOT IN CONTRACT		
OC	ON CENTER		
OD	OUTSIDE DIAMETER		
PA	PRE AERATION		
PEJ	PREMOLDED EXPANSION JOINT		
PV	PLUG VALVE		
PVC	POLYVINYL CHLORIDE		

NOTES:

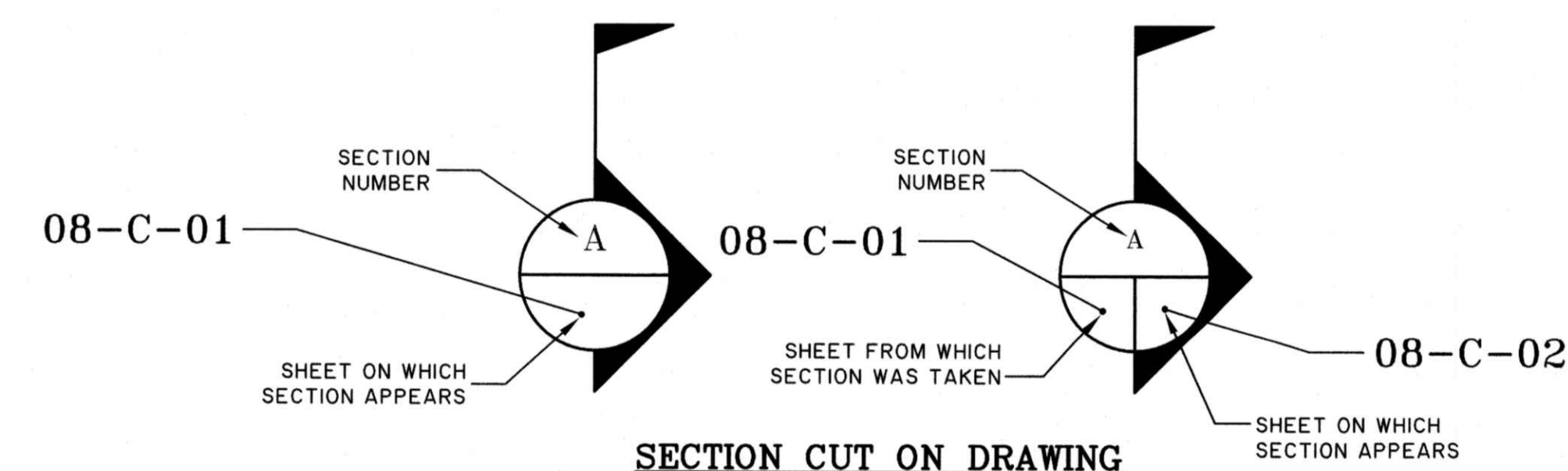
- CONTACT THE ENGINEER FOR ABBREVIATIONS LISTED
- THIS IS A STANDARD ABBREVIATION LIST. THEREFORE, SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS LIST AND NOT ON PLANS.

CURVE DATA

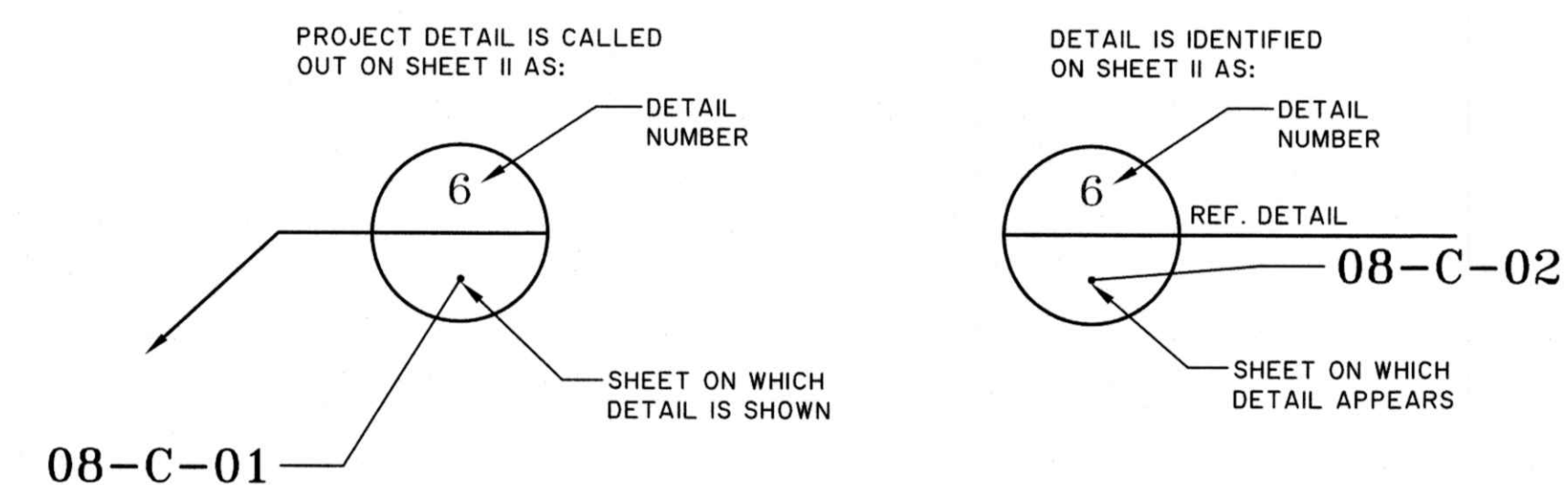
PC	CURVE DATA
PT	POINT OF CURVE
BVC	POINT OF TANGENCY
EVC	BEGINNING OF VERTICAL CURVE
e	ENDING OF VERTICAL CURVE
Δ	EXTERNAL DISTANCE
T	DELTA
L	TANGENT LENGTH
R	LENGTH OF CURVE
	RADIUS

NOTES:

1. CONTACT THE ENGINEER FOR ABBREVIATIONS NOT LISTED
2. THIS IS A STANDARD ABBREVIATION LIST, THEREFORE, SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS LIST AND NOT ON THE PLANS.



SECTION CUT ON DRAWING

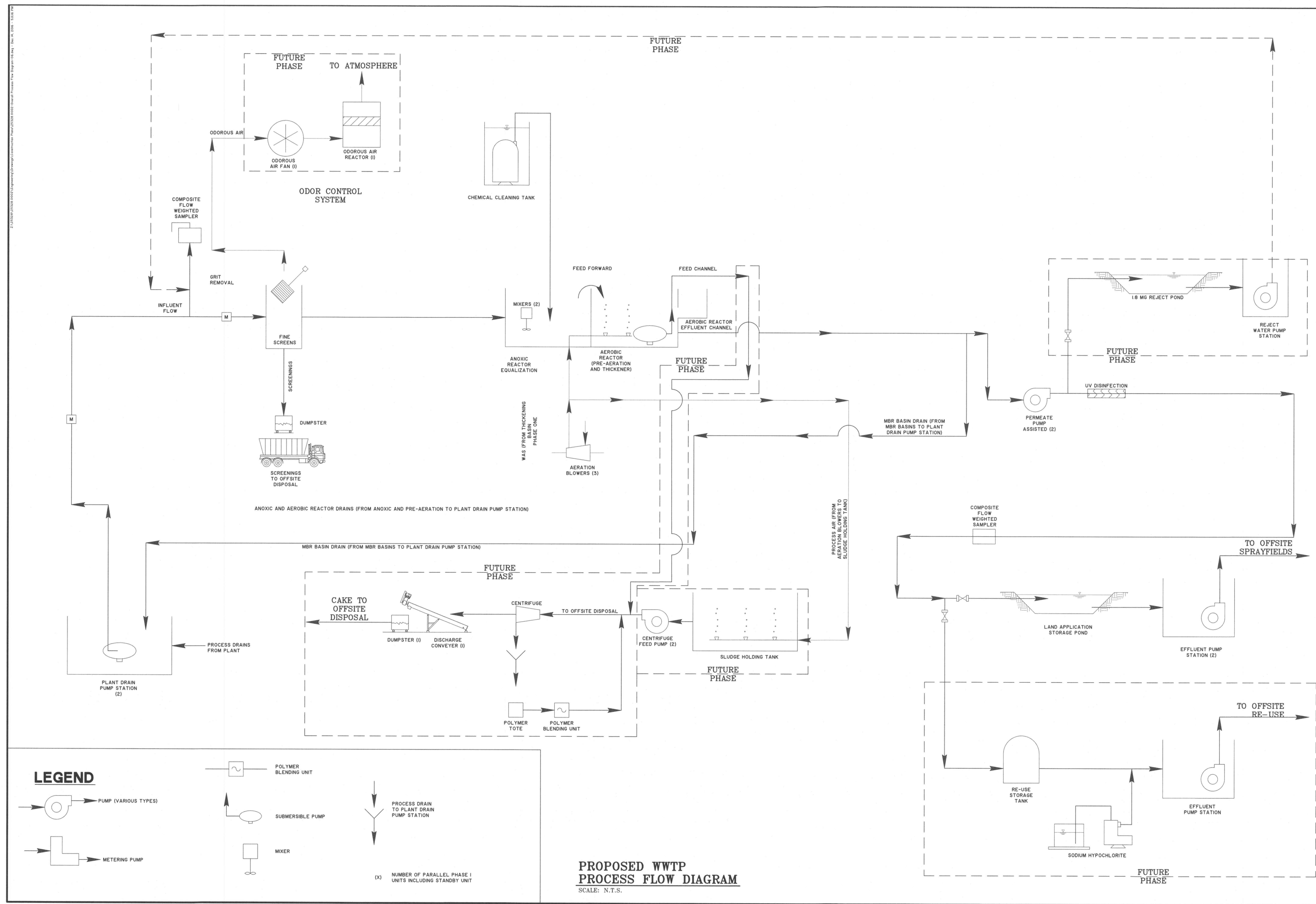


DETAIL CALL OUT

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JOB NO:	J-25328.0002
DATE:	12/16/16
DRAWN:	DNF
DESIGNED:	MFY
REVIEWED:	MFY
APPROVED:	MFY
SCALE:	AS NOTED

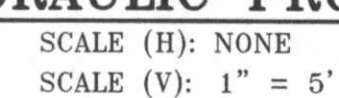


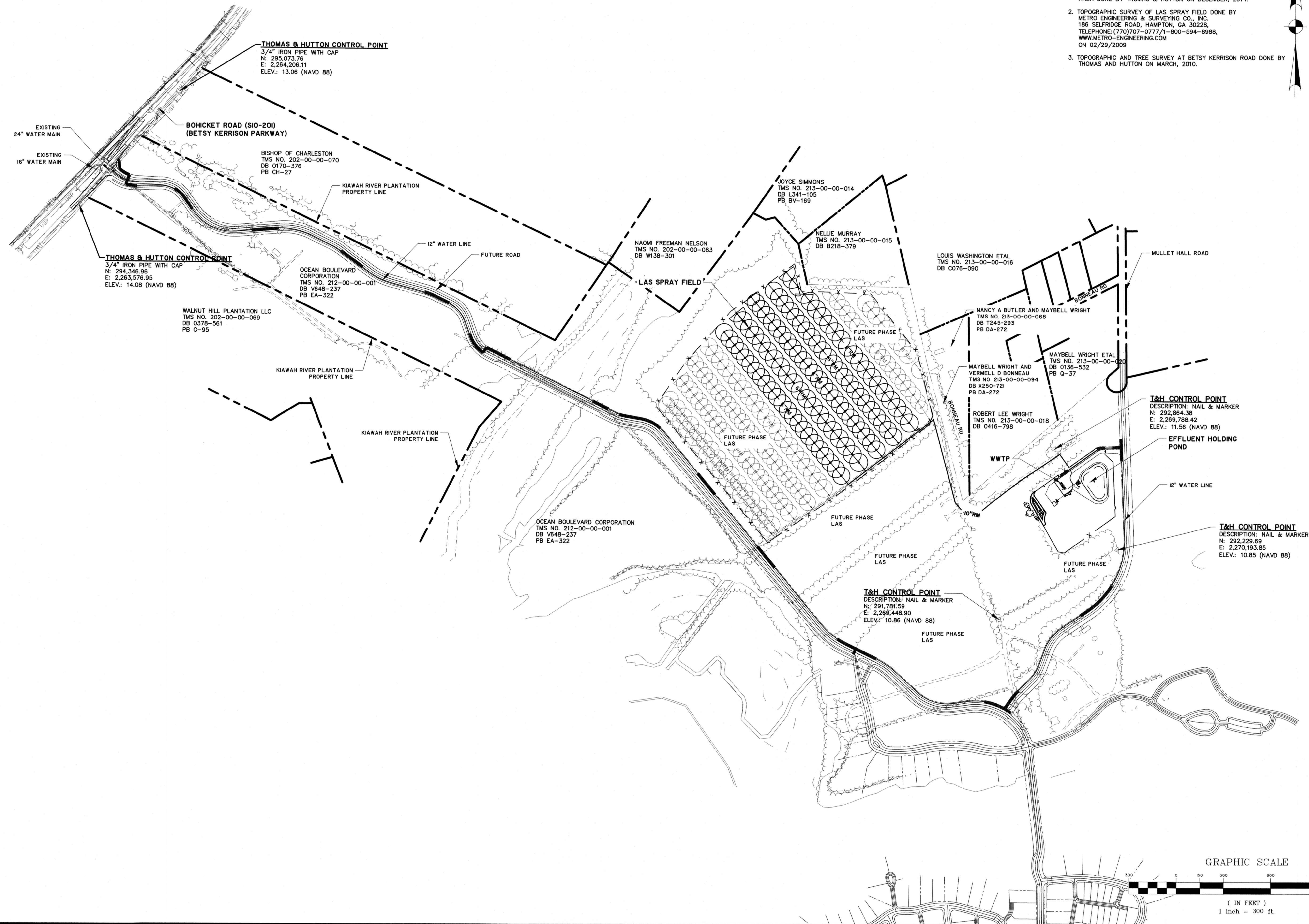
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DATE:	12/16/16
DRAWN:	DNF
DESIGNED:	KEN
REVIEWED:	MFY
APPROVED:	MFY
SCALE:	AS NOTED

01-G-07



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KIAWAH RIVER PLANTATION

HOLDINGS, LP

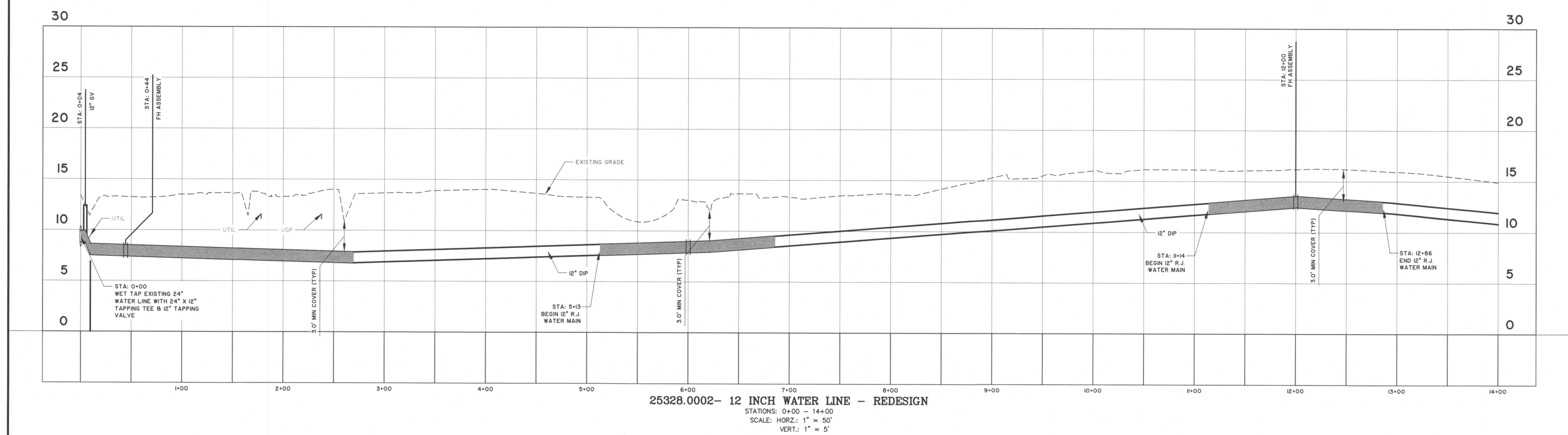
CHARLESTON COUNTY, SOUTH CAROLINA

KIAWAH RIVER PLANTATION WWTP PHASE I

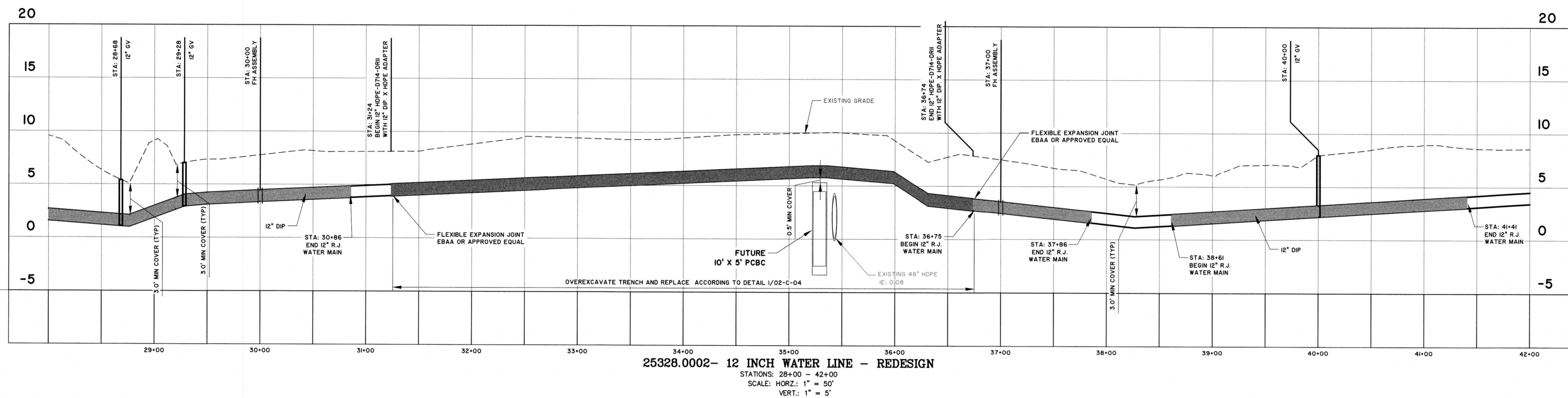
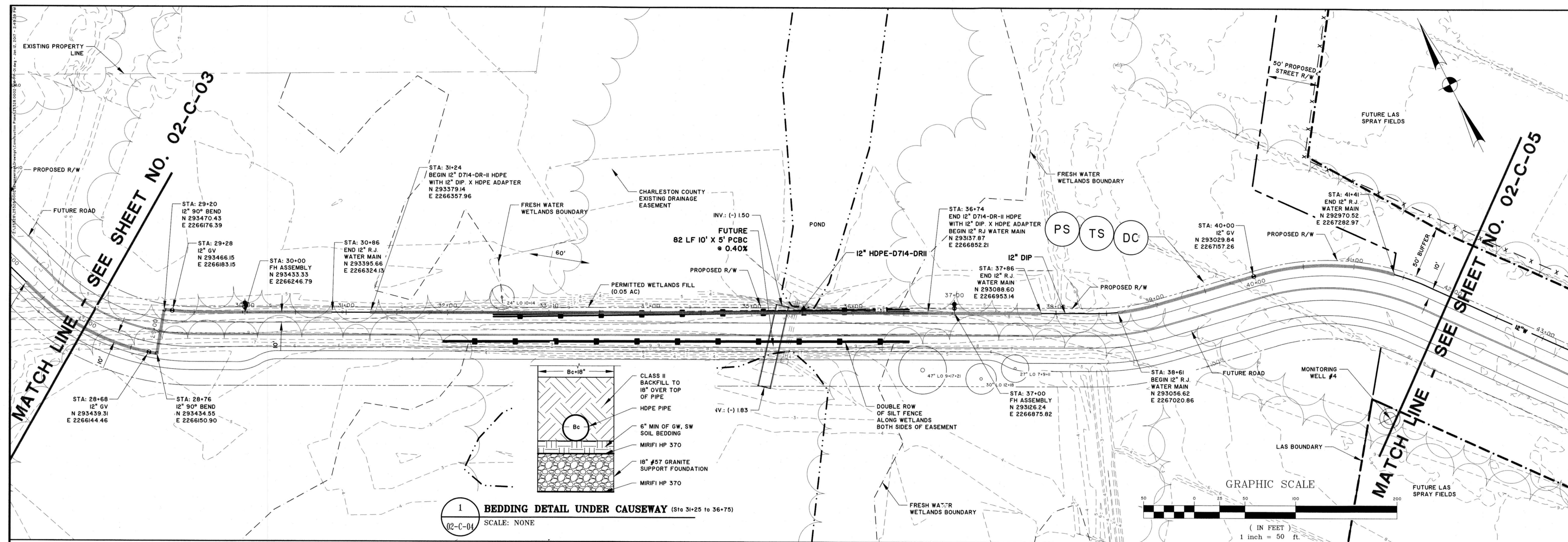
SURVEY CONTROL SHEET

JOB NO:	J-25328.0002
DATE:	12/16/16
DRAWN:	DNF
DESIGNED:	MFY
REVIEWED:	MFY
APPROVED:	MFY
SCALE:	1" = 300'

01-V-01



STATIONS: 0+00 - 14+00
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'



**KIAWAH RIVER PLANTATION
HOLDINGS, LP**
CHARLESTON COUNTY, SOUTH CAROLINA

**KIAWAH RIVER PLANTATION WWTP PHASE I
WATER MAIN - PLAN AND PROFILE**

JOB NO:	J-25328 0002
DATE:	12/16/16
DRAWN:	DNF
DESIGNED:	DNF
REVIEWED:	MFY
APPROVED:	MFY
SCALE:	AS NOTED

02-C-04

